

ABSTRACT OF THE DISCLOSURE

The invention provides a method of treating a heart to remodel gap junctions, obtain gap junctional remodeling and/or alteration of effective refractory period comprising contacting linked multiple electrode pairs to an epicardial surface of a heart, and connecting
5 the electrode pairs to a pacemaker to apply periodic electrical signals to the epicardial surface through the electrode pairs, the signals being applied for a sufficient time and having characteristics sufficient to remodel gap junctions, obtain gap
10 junctional remodeling and/or alteration of effective refractory period in the heart. The invention also provides a device comprising a strip of electrode material having mounted thereon linked multiple electrode pairs arranged in two columns.